

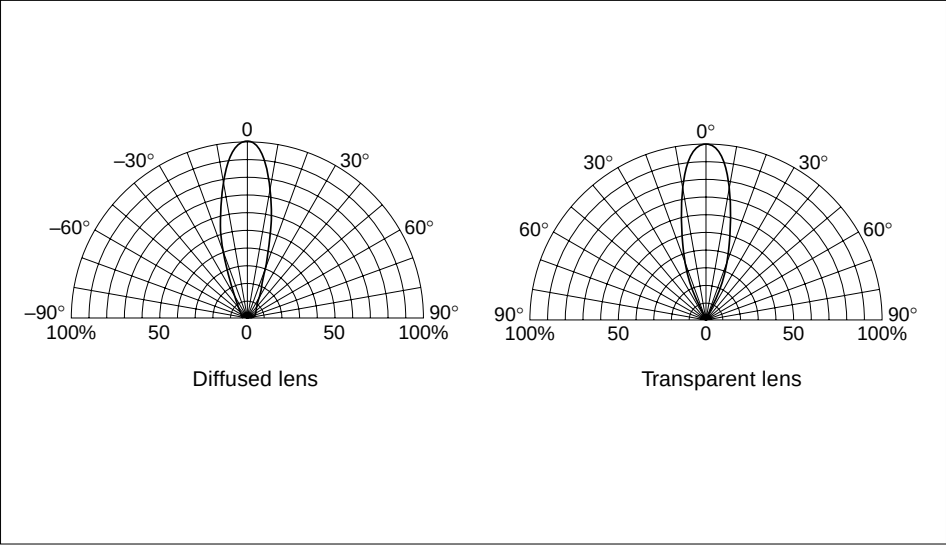
5φ Round Narrow Viewing Angle LEDs

SEL1050M Series (available as Direct Mount)

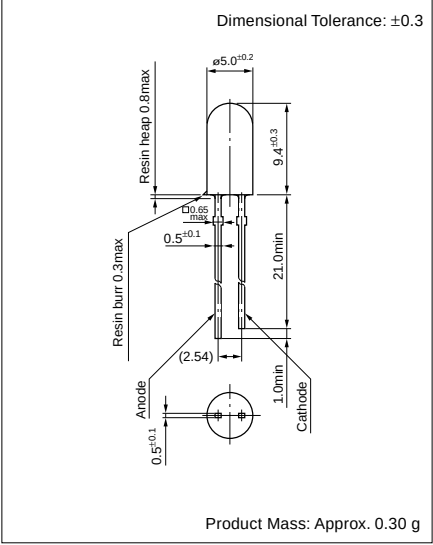
Part Number	Emitting Color	Lens Color	Forward Voltage		Conditions IF (mA)	Luminous Intensity		Conditions IF (mA)	Peak Wavelength		Conditions IF (mA)	Dominant Wavelength		Conditions IF (mA)	Spectrum Half Bandwidth		Conditions IF (mA)	Chip Material
			VF (V) TYP	MAX		Iv (mcd) TYP			λP (nm) TYP			λd (nm) TYP			Δλ (nm) TYP			
SEL1250RM	Red	Diffused red	1.9	2.5	10	48		20	630		10	620		10	35		10	GaAsP
SEL1250SM	Red	Transparent red	1.9	2.5	10	75		20	630		10	620		10	35		10	GaAsP
SEL1850AM	Amber	Transparent orange	1.9	2.5	10	90		20	610		10	605		10	35		10	GaAsP
SEL1850DM	Amber	Diffused orange	1.9	2.5	10	60		20	610		10	605		10	35		10	GaAsP
SEL1950KM	Orange	Transparent orange	1.9	2.5	10	96		20	587		10	590		10	33		10	GaAsP
SEL1450EKM	Green	Transparent green	2.0	2.5	10	190		20	560		10	567		10	20		10	GaP
SEL1450GM-YG	Green	Diffused green	2.0	2.5	10	120		20	560		10	567		10	20		10	GaP
SEL1550CM	Pure green	Water clear	2.0	2.5	10	72		20	555		10	559		10	20		10	GaP
SEL1E50CM-S	Blue	Water clear	4.0	4.6	10	80		10	430		10	466		10	65		10	GaN
SELU1250CM	Ultra-high luminosity	Red	2.0	2.5	20	900		20	635		20	625		20	15		20	AlGaInP
* SELT1D50CM-S		Pure green	3.3	4.0	20	6500		20	512		20	520		20	35		20	InGaInP
SELT1E50CM-S		Blue	3.3	4.0	20	2000		20	460		20	465		20	25		20	InGaInP

* Mass production in preparation

Directional Characteristics (representative example)



External Dimensions (Unit: mm)



5-1 Visible Light LEDs

Absolute Maximum Ratings

●Visible Light Unicolor Lamp

Parameter	Unit	Ratings					Conditions
		GaP	GaAsP	GaAlAs	AlGaInP	InGaN	
P _D	mW	75				120	
I _F	mA	30					
ΔI _F	mA/°C	-0.45					25°C or higher
I _{FP}	mA	100				70	f=1kHz, tw≤100μs
V _R	V	3	5				
T _{op}	°C	-30 to +85				-30 to +80	
T _{stg}	°C	-30 to +100					

●Visible Light Bicolor Lamp

Parameter	Unit	Ratings					Conditions
		GaP	GaAsP	GaAlAs	AlGaInP	InGaN	
P _D	mW	75				120	Same conditions for simultaneous lighting
I _F	mA	30					
ΔI _F	mA/°C	-0.45					25°C or higher f=1kHz, t _w ≤100μs
I _{FP}	mA	100					
V _R	V	4			5		
T _{op}	°C	-30 to +85					
T _{stg}	°C	-30 to +100					

●Visible Light Unicolor Surface Mount LEDs

Parameter	Unit	Ratings					Conditions
		GaP	GaAsP	GaAlAs	AlGaInP	InGaN	
I _F	mA	30				20	
ΔI _F	mA/°C	-0.45				-0.27	25°C or higher
I _{FP}	mA	100 ^{*1}				70 ^{*2}	f=1kHz, tw≤100μs
V _R	V	3	5				
T _{op}	°C	-30 to +85				-30 to +80	
T _{stg}	°C	-30 to +100					

*1: 70mA for SEC1005/1007 Series

*2: 50mA for SEC1005/1007 Series

●Visible Light Bicolor Surface Mount LEDs

Parameter	Unit	Ratings	Conditions
		SEC2002/2004	
Pd	mW	75	
		(Same conditions for simultaneous lighting)	
IF	mA	30	
ΔIF	mA/°C	−0.45	25°C or higher
IFP	mA	70	f=1kHz, tw≤100μs
VR	V	4	
Top	°C	−30 to +85	
Tstg	°C	−30 to +100	

●Visible Light Three Element Surface Mount LEDs

Parameter	Unit	Ratings		Conditions
		SECT3M02C-S		
		Red	Green/Blue	
P _D	mW	75	120	When one chip lights up (same as green/blue for simultaneous lighting)
I _F	mA	30		
ΔI _F	mA/°C	−0.45		25°C or higher
I _{FP}	mA	70	50	f=1kHz, t _w ≤100μs
V _R	V	5		
T _{op}	°C	−30 to +80		
T _{sta}	°C	−30 to +100		